

Amido Black Fischer 98

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Amido Black Fischer 98

1 INTRODUCTION /SCOPE

- A. Amido Black (Fischer 98) is a process used by FBI Laboratory Friction Ridge Discipline personnel to develop latent prints and enhance visible prints that have been deposited in blood.
- B. The process can be used on all surfaces but is primarily used on non-porous items.

2 STANDARDS AND CONTROLS

See Processing Overview ([FRD-300](#)).

3 LIMITATIONS

- A. The background of porous items may become stained during the process and obscure information.
- B. On clear or light colored surfaces, the alternate solution with Tween 20 may stain the background more than the standard version with Photo-Flo 600.

4 EQUIPMENT

- Distilled water
- Water (for rinse)
- Naphthol Blue Black (dye content $\geq 85\%$)
- 5-Sulfosalicylic Acid (purity $\geq 99\%$)
- Formic Acid (concentrated)
- Sodium Carbonate
- Photo-Flo 600 Solution
- Tween 20
- N-dodecylamine Acetate
- Glacial Acetic Acid

5 PROCEDURE

5.1 Solution Preparation

Personnel will prepare the solutions as follows. Alternative amounts of the final working solution may be prepared, provided the same ratio of chemicals mixed is retained.

5.1.1 Standard Developer Solution

- A. Combine the following:
 - Naphthol Blue Black - 3 g
 - Glacial Acetic Acid - 50 mL
 - Distilled water - 500 mL
 - 5-Sulfosalicylic Acid - 20 g
 - Sodium Carbonate - 3 g
 - Formic Acid - 50 mL
 - Photo-Flo 600 Solution - 12.5 mL

- B. Stir solution until Naphthol Blue Black dissolves (approximately 30 minutes).
- C. Raise final volume to approximately 1000 mL with distilled water.
- D. Solution can be used immediately with acceptable results but works best if mixed and stored in a bottle several days before use.

5.1.2 Alternate Developer Solution

Photo-Flo 600 may be replaced with Tween 20 detergent solution.

5.1.2.1 *Tween 20 Detergent Solution*

Personnel will combine the following and stir until all chemicals dissolve.

- n-Dodecylamine Acetate - 3 g
- Tween 20 - 4 g
- Distilled water - 1000 mL

5.1.2.2 *Alternate Developer Solution*

- A. Combine the following:
 - Naphthol Blue Black - 3 g
 - Glacial Acetic Acid - 50 mL
 - Distilled water - 500 mL
 - 5-Sulfosalicylic Acid - 20 g
 - Sodium Carbonate - 3 g
 - Formic Acid - 50 mL
 - Tween 20 Detergent Solution - 125 mL
- B. Stir solution until Naphthol Blue Black dissolves (approximately 30 minutes).
- C. Raise final volume to approximately 1000 mL with distilled water.
- D. Solution can be used immediately with acceptable results but works best if mixed and stored in a bottle several days before use.

5.2 **Application**

- A. Personnel will complete the following steps in order:
 1. Apply developer solution to the item by spraying, submersion, painting, or squirting.
 - i. Application can also be accomplished by the tissue method which involves wetting a durable tissue material and applying the material directly to the surface or by applying through a durable tissue material onto the surface.
 2. Leave developer solution on the item for 3 to 5 minutes.
 3. Rinse with water.
 4. Allow the item to dry.
- B. The developer solution may be reapplied as needed by repeating steps 1 through 3 until no further development is seen.
 1. Personnel will be cautious of overdevelopment and destruction of background.
- C. Capture appropriate friction ridge details as applicable (digitally or photographically).

5.3 Storage

Developer solutions and Tween 20 Detergent solution may be stored in any type of laboratory accepted receptacle.

5.4 Shelf Life

Developer solutions and Tween 20 Detergent solution have an indefinite shelf life provided the reagent checks are satisfactory.

6 SAFETY

See [FBI Laboratory Safety Manual](#) for appropriate information.

7 REVISION HISTORY

Revision	Issued	Changes
03	07/15/2021	Replace Latent Print Units with Friction Ridge Discipline. Minor wording changes. Streamline equipment list. Change tissue to durable tissue material. Re-organization and re-numbering of sections. Section 1 - removed blood fixer reference and added surfaces. Section 2 - added limitations. Section 4.1 - divided concept into two separate sections, Section 4.1.1 and Section 4.1.2 and added option on alternate amounts. Section 4.2 - added reapplication allowance. Section 5 - added Preamble reference.
04	08/17/2022	Reformatted Section 5.1.2.1 – Separated Tween 20 Solution Section 5.1.2.2 – Added full list for Alternate Developer Solution Section 5.2 – Reworded tissue method Section 5.3 – Added Tween 20 Solution Section 5.4 – Added Tween 20 Solution